Application No.: 10/645,422 Amendment Dated May 5, 2008 Reply to Office Action of February 11, 2008

Remarks/Arguments:

On page 2, the Official Action rejects claim 1 under 35 U.S.C. § 103 as being unpatentable over Sawyer (U.S. Patent No. 5,282,737) in view of Peyrovian (U.S. Patent No. 6,707,800). It is respectfully submitted, however, that the claim is patentable over the art of record for the reasons set forth below

Independent claim 1, as amended, recites a processing method where pieces of information such as schedule of usage of the transmission band and schedule of available transmission band define a band reservation rule ("schedule of usage ... schedule of the transmission band which is available ... as defined as a band reservation rule"). The band reservation rule is used for partially assigning and exchanging the bandwidth between a plurality of terminals by the beginning of a term. This feature is recited in claim 1 wherein the transmission band is partially assigned and exchanged at the time of the beginning of the term in order to maximize the usage efficiency of the band during the fixed term duration ("partially assigning and partially exchanging a predetermined amount of the transmission band between the plurality of respective terminals at the time of the beginning of the term for maximizing the usage efficiency of all the available transmission band during the term duration").

The partial assigning and partial exchanging of the bandwidth by the beginning of a term as recited in Applicants' claim 1 is supported in Applicants' Fig. 2. Specifically, Applicants' Fig. 2 shows the bandwidth usage of terminal unit A and terminal unit B. Terminals A and B send pieces of information including a schedule of usage, schedule of transmission band and schedule of term. These pieces of information are then utilized in order to partially assign and partially exchange the transmission band between terminals A and B. For example, terminal A is assigned a bandwidth of 10 Mbs and terminal B is assigned a bandwidth of 5 Mbs. These partial assignments are performed by the beginning of the term (zero hours). These two partial assignments are then held through the duration of the term (between zero hours and five hours). Support for these bandwidth assignments are found on page 23 lines 5-20 of the specification ("terminal A requires a transmission band of 10 Mbs during the period of time 0 hours to 5 hours"). Thus, the partial assigning exchanging is performed at the beginning of the term so that the usage of the bandwidth during the term duration is fixed (10 Mbs for terminal A and 5 Mbs for terminal B assigned at 0 hours and lasting through the term 0-5 hours). Fig. 2 also shows two other terms with different time lengths and bandwidth assignments (5-7 Hours

Application No.: 10/645,422 Amendment Dated May 5, 2008 Reply to Office Action of February 11, 2008

1Mbps for terminal A and 14 Mbps for terminal B, **7-15 hours** 10 Mbps for terminal A and 5 Mbps for terminal B).

Column 7, lines 16-25, Peyrovian teaches partially assigning and partially exchanging transmission band between circuits ("bandwidth assigned to idle virtual circuits within a given transmission channel 120, 121 is made available to other virtual circuits within the same transmission channel 120, 121 so as to most efficiently utilize the bandwidth capacity of the given transmission channel"). For example, after detecting an idle circuit (not using any bandwidth), another circuit is able to utilize the unused bandwidth. Peyrovian, however, teaches that this exchange is performed at the time of detection of an idle circuit and is not performed at the beginning of a term. As shown in Fig. 2, Applicants' exchanging and assigning is performed at the beginning (0 Hours) of a term (0-5 Hours). Peyrovian's exchanging is performed when an Idle circuit is detected (the beginning of a Idle circuit is not the beginning of a term). Peyrovian's beginning of an Idle circuit is not the beginning of a term, because a term lasts a predetermined amount of time duration, as required by amended claim 1. Peyrovian's assignment is dictated by the detection of idle circuits, whenever they occur, and does not last for a predetermined amount of time, the assignment is indefinite (no fixed term), it lasts until the circuit becomes idle

Sawyer teaches charging users based on bandwidth usage. Iwata teaches quality of service based on history information. Sawyer and Iwata, however, do not suggest partially assigning and exchanging bandwidth by the beginning of a term. Thus, Sawyer and Iwata do not suggest the features of Applicants' claim 1.

Accordingly, for the reasons set forth above, claim 1 is patentable over the art of record.

Newly added claim 43 recites an additional method step wherein the partial assignment and partial exchanging of the transmission band is based on a necessary cost. This feature is supported on at least pages 21, lines 1-10 of the originally filed specification.

Claims 2, 41, 42 and 43 include all the features of claim 1 from which they depend. Thus, claims 2, 41, 42 and 43 are also patentable over the art of record for the reasons set forth above.

Application No.: 10/645,422 Amendment Dated May 5, 2008 Reply to Office Action of February 11, 2008

In view of the amendments and arguments set forth above, the above-identified application is in condition for allowance which action is respectfully requested.

Respectfully submitted,

Allan Ratner, Reg. No. 19,717 Attorney for Applicants

RAE/dmw

Dated: May 5, 2008

P.O. Box 980 Valley Forge, PA 19482 (610) 407-0700

NM253180